

AMENDMENTS TO CLAIMS

1. (Amended) A call tracing system for use in a telephony system having nodes in relationship to one another by communication links carrying signaling messages being used to set up voice channels in the telephony system to facilitate calls, the call tracing system comprising:

[at least one element manager coupled to probes]

a) a first probe

(i) monitoring respective communication links for signaling link messages related to a given call and

(ii) issuing a trigger [triggers] with a time stamp [to the element manager] in response to detecting a signaling link message related to the given call;

b) an element manager coupled to the first probe so as to receive and to rebroadcast the trigger; and

c) a second probe

(i) monitoring communication links for signaling link messages,

(ii) having a buffer for the temporary storage of signaling link messages,

(iii) receiving the trigger with the time stamp rebroadcast by the element manager, and

(iv) examining the buffer to look for signaling link messages that were placed in the buffer before the second probe received the trigger.

2-3. Canceled

4. (Original) The call tracing system set forth in claim 3, wherein messages matching a signaling criteria found in the buffer within a time window related to the time stamp are processed as if seen in real time.

5. (Amended) The call tracing system as set forth in claim 4, wherein the element [managers broadcast] manager broadcasts trigger information to [one another] at least one additional element manager so that any probe can be connected to any element manager without missing any signaling link messages.

6. (Amended) A method for call tracing in a telephony system having nodes in relationship to one another by communication links carrying signaling messages being used to set up voice channels in the telephony system to facilitate calls, the method comprising the steps of:

- a) entering telephone number criteria to be detected;
- b) detecting at a first probe a signaling message with the telephone number criteria;
- c) issuing a trigger upon detecting the telephone number criteria; [and]
- d) stamping of the [of the] trigger with a time [date] stamp;
- e) broadcasting the trigger message to a second probe;
- f) placing signaling messages detected at a second probe in storage;
- g) discovering signaling messages detected by the second probe before the second probe received the trigger message by examining the signaling messages in the storage for messages related to the telephone number criteria.

7-8. Canceled.

9. (Original) The method of claim 8, wherein the storage is a buffer.

10. (Amended) The method of claim 8, further comprising the second probe transmitting messages in the storage [which] that arrived prior to the trigger time stamp.

11. Cancelled.

12. (Amended) An apparatus for call tracing in a telephony system having nodes in relationship to one another by communication links carrying signaling messages being used to set up voice channels in the telephony system to facilitate calls, comprising:

- a) means for entering a phone number criteria to be detected;
- b) means for detecting the phone number criteria; [and]
- c) means for issuing a trigger time stamp upon detecting the phone number criteria;

- d) means for broadcasting detecting criteria and the trigger time stamp to a probe;
- e) means for detecting signaling messages at the at least one other probe based on the detecting criteria and time stamp even where signaling messages were received by the probe before the broadcast was received by the probe.

13. Canceled.

14. (Original) The apparatus as in claim 12 further comprising means for examining messages for the phone number criteria.

15. (Original) The apparatus as in claim 14, wherein the messages are examined for similar signaling criteria are identified and processed as if in real time.

16. (Original) The apparatus as in claim 15, wherein the criteria is messages that arrived prior to the trigger.

17. (Amended) The [means] apparatus as in claim 14, further comprising means for transmitting the signaling message that arrived prior to the trigger [message].

18. (Original) The apparatus as in claim 12, wherein the means for entering is an element manager within the monitoring system.

19. (Original) The apparatus as in claim 12, wherein the means for issuing is an element manager.

20. (Amended) The apparatus as in claim 12, wherein the means for detecting is a second probe.